

=> s picolinic acid/cn or fusaric acid/cn  
1 PICOLINIC ACID/CN  
1 FUSARIC ACID/CN  
L1 2 PICOLINIC ACID/CN OR FUSARIC ACID/CN

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	9.24	9.45

FILE 'CAPLUS' ENTERED AT 11:03:16 ON 28 JUL 2003  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 28 Jul 2003 VOL 139 ISS 5  
FILE LAST UPDATED: 27 Jul 2003 (20030727/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l1/thu  
3011 L1  
524167 THU/RL  
L2 79 L1/THU  
(L1 (L) THU/RL)

=> s l2 (l)systemi?  
79476 SYSTEMI?  
L3 0 L2 (L)SYSTEMI?

=> s l2 and (pharmceu?(l)composi?)  
8 PHARMCEU?  
1163200 COMPOSI?  
0 PHARMCEU?(L)COMPOSI?  
L4 0 L2 AND (PHARMCEU?(L)COMPOSI?)

=> s l2 and (pharmaceu?(l)composi?)  
228139 PHARMACEU?  
1163200 COMPOSI?  
9808 PHARMACEU?(L)COMPOSI?  
L5 3 L2 AND (PHARMACEU?(L)COMPOSI?)

=> d bib abs 1-3

---

L5 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 2001:152445 CAPLUS  
DN 134:212691  
TI **Pharmaceutical compositions** containing sugars for reducing the appearance of cellulite

IN Murad, Howard  
PA USA  
SO PCT Int. Appl., 50 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001013865	A1	20010301	WO 2000-US22790	20000818
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	EP 1207840	A1	20020529	EP 2000-957590	20000818
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			
	JP 2003507400	T2	20030225	JP 2001-518005	20000818
	US 2002137691	A1	20020926	US 2002-51189	20020122
PRAI	US 1999-150034P	P	19990820		
	US 2000-641376	A3	20000818		
	WO 2000-US22790	W	20000818		

AB Compsn. and methods for reducing or eliminating the appearance of cellulite involves administering to a patient in need of treatment therapeutically effective amts. of a sugar compd. that is converted to a glycosaminoglycan in the patient in an amt. sufficient to thicken the skin, a primary antioxidant component in an amt. sufficient to substantially inhibit the formation of collagenase and elastase, at least one amino acid component in an amt. sufficient to assist in the thickening of the skin, and at least one transition metal component in an amt. effective to bind collagen and elastic fibers and thicken skin so as to reduce or eliminate the appearance of cellulite. A preferred method of treatment further includes administering the components above in conjunction with a vascular dilator to improve blood supply to the skin and/or a fat burner to reduce absorption or digestion of fat in the digestive tract or to prevent the prodn. of fat. The comps. and methods may optionally include chromium picolinate to facilitate entry of sugar into cells to improve fat metab. In one embodiment, these methods encompass administering the amts. as a pharmaceutical compn.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 1999:330042 CAPLUS  
DN 130:343038  
TI **Pharmaceutical compositions** containing chromium salts  
for supplementing dietary chromium  
IN Harpe, Jondela; Price, Fredric D.; Chakrin, Lawrence W.; Komorowski, James R.; Skluth, Lauren K.  
PA AMBI Inc., USA  
SO U.S., 6 pp.  
CODEN: USXXAM

DT Patent  
LA English

FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5905075	A	19990518	US 1998-143256	19980828

ZA 9810222	A	19990617	ZA 1998-10222	19981109
FR 2782640	A1	20000303	FR 1998-14190	19981112
FR 2782640	B1	20001215		
US 6100250	A	20000808	US 1999-229463	19990112
US 5980905	A	19991109	US 1999-291560	19990414
CA 2342356	AA	20000309	CA 1999-2342356	19990628
WO 2000012095	A1	20000309	WO 1999-US14614	19990628

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DE, DK, DK, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9947249	A1	20000321	AU 1999-47249	19990628
EP 1105138	A1	20010613	EP 1999-930796	19990628

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

US 6100251	A	20000808	US 2000-480473	20000110
US 6323192	B1	20011127	US 2000-634664	20000808

PRAI US 1998-143256 A 19980828  
 US 1998-144026 A 19980828  
 US 1999-229463 A2 19990112  
 US 1999-291560 A 19990414  
 WO 1999-US14614 W 19990628  
 US 2000-480473 A1 20000110

AB Compns. comprising chromic tripicolinate or chromic polynicotinate in combination with nicotinic acid, picolinic acid or both nicotinic acid and picolinic acid are disclosed. The compns. may further comprise at least one of a cyclooxygenase inhibitor, an acid and a mucolytic. The compns. are useful for supplementing dietary chromium, lowering blood glucose levels, lowering serum lipid levels and increasing lean body mass (no data).

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1995:573882 CAPLUS

DN 122:306552

TI **Pharmaceutical compositions** comprising metal complexes

IN Abrams, Michael Jeffrey; Fricker, Simon Paul; Murrer, Barry Anthony; Vaughan, Owen John

PA Johnson Matthey PLC, UK

SO PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9505814	A1	19950302	WO 1994-GB1817	19940819
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN				
RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
ZA 9406262	A	19950320	ZA 1994-6262	19940818
CA 2170253	AA	19950302	CA 1994-2170253	19940819
AU 9473907	A1	19950321	AU 1994-73907	19940819
AU 698785	B2	19981105		
EP 714294	A1	19960605	EP 1994-923817	19940819

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE

JP 09501927	T2	19970225	JP 1994-507412	19940819
HU 74947	A2	19970328	HU 1996-441	19940819
FI 9600849	A	19960223	FI 1996-849	19960223
NO 9600754	A	19960423	NO 1996-754	19960223
US 5824673	A	19981020	US 1996-602814	19960226
US 6284752	B1	20010904	US 1998-175028	19981019
US 2002045611	A1	20020418	US 2001-802523	20010309
US 6417182	B2	20020709		

PRAI GB 1993-17686 A 19930825  
 WO 1994-GB1817 W 19940819  
 US 1996-602814 A1 19960226  
 US 1998-175028 A1 19981019

AB New pharmaceutical compns. comprise metal complexes have activity against diseases caused by or related to overprodn. or localized high concn. of nitric oxide in the body. E.g., Ru(Hhedtra)acac.H2O [hedtra = N-(2-hydroxyethyl)ethylenediaminetriacetic acid; acac = acetylacetone] was prepd.

=> d hit 3

L5 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI **Pharmaceutical compositions** comprising metal complexes  
 IT 50-21-5DP, Lactic acid, ruthenium complexes 60-00-4DP, Edta, ruthenium complexes 64-19-7DP, Acetic acid, ruthenium complexes 66-71-7DP, 1,10-Phenanthroline, ruthenium complexes 67-43-6DP, Dtpa, ruthenium complexes 67-68-5DP, ruthenium complexes 79-09-4DP, Propionic acid, ruthenium complexes **98-98-6DP**, Picolinic acid, ruthenium complexes 107-15-3DP, 1,2-Ethanediamine, osmium complexes 118-71-8DP, Maltol, ruthenium complexes 123-54-6DP, ACAC, ruthenium complexes 139-13-9DP, Nta, ruthenium complexes 144-62-7DP, Oxalic acid, ruthenium complexes 150-39-0DP, N-(2-Hydroxyethyl)ethylenediaminetriacetic acid, ruthenium complexes 295-37-4DP, 1,4,8,11-Tetraazacyclotetradecane, ruthenium complexes 366-18-7DP, 2,2'-Bipyridine, ruthenium complexes 499-83-2DP, Dipicolinic acid, ruthenium complexes 533-75-5DP, Tropolone, ruthenium complexes 923-74-0DP, ruthenium complexes 2782-69-6DP, ruthenium complexes 5657-17-0DP, Edda, ruthenium complexes 7440-04-2DP, Osmium, complexes 7440-18-8DP, Ruthenium, complexes 7664-41-7DP, Ammonia, ruthenium complexes 35998-29-9DP, Hbed, ruthenium complexes 163347-71-5DP, ruthenium complexes  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (metal complex pharmaceuticals for treatment of diseases from excess nitric oxide)

=> d his

(FILE 'HOME' ENTERED AT 11:01:42 ON 28 JUL 2003)

FILE 'REGISTRY' ENTERED AT 11:01:51 ON 28 JUL 2003

L1 2 S PICOLINIC ACID/CN OR FUSARIC ACID/CN

FILE 'CAPLUS' ENTERED AT 11:03:16 ON 28 JUL 2003

L2 79 S L1/THU

L3 0 S L2 (L) SYSTEMI?

L4 0 S L2 AND (PHARMCEU? (L) COMPOSI?)

L5 3 S L2 AND (PHARMACEU? (L) COMPOSI?)

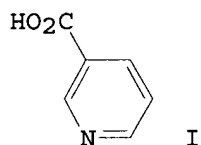
=> s l2 and chelat?

115309 CHELAT?

L6 18 L2 AND CHELAT?

=> d bib abs hit 18

L6 ANSWER 18 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 1982:135441 CAPLUS  
DN 96:135441  
TI Antitumor activity of picolinic acid in CBA/J mice  
AU Leuthauser, Susan W. C.; Oberley, Larry W.; Oberley, Terry D.  
CS Radiat. Res. Lab., Univ. Iowa, Iowa City, IA, 52242, USA  
SO JNCI, Journal of the National Cancer Institute (1982), 68(1), 123-6  
CODEN: JJIND8; ISSN: 0198-0157  
DT Journal  
LA English  
GI



AB The growth of a solid tumor induced by i.m. implantation of Ehrlich ascites tumor cells in inbred CBA/J mice was retarded by treatment with an Fe<sup>2+</sup> **chelator**, picolinic acid (I) [98-98-6]. Survival of the mice was also significantly increased after treatment. However, the Fe<sup>2+</sup> **chelator** deferoxamine had no such effects; tumor growth was slightly enhanced, and survival was decreased.

AB The growth of a solid tumor induced by i.m. implantation of Ehrlich ascites tumor cells in inbred CBA/J mice was retarded by treatment with an Fe<sup>2+</sup> **chelator**, picolinic acid (I) [98-98-6]. Survival of the mice was also significantly increased after treatment. However, the Fe<sup>2+</sup> **chelator** deferoxamine had no such effects; tumor growth was slightly enhanced, and survival was decreased.

IT 98-98-6  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(antitumor activity of)

=> d bib abs hit 1-17

L6 ANSWER 1 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 2003:466679 CAPLUS  
DN 139:30792  
TI Agent and method for prevention and treatment of cancer in animals  
IN Fernandez-Pol, Jose A.  
PA Novactyl, Inc., USA  
SO U.S., 30 pp., Cont.-in-part of U.S. Ser. No. 127,620.  
CODEN: USXXAM  
DT Patent  
LA English  
FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6579891	B1	20030617	US 2000-657554	20000908
	US 5767135	A	19980616	US 1995-581351	19951229
	US 6127393	A	20001003	US 1998-127620	19980801
	US 6407125	B1	20020618	US 2000-677500	20001002

US 6441009	B1	20020827	US 2000-676911	20001002
US 2002037908	A1	20020328	US 2001-904987	20010712
WO 2002020486	A2	20020314	WO 2001-US27578	20010905
WO 2002020486	A3	20020704		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,  
PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,  
UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

	AU 2001088788	A5	20020322	AU 2001-88788	20010905
PRAI	US 1995-581351	A2	19951229		
	US 1996-26992P	P	19960920		
	US 1996-24221P	P	19961022		
	US 1997-843157	B2	19970411		
	US 1998-127620	A2	19980801		
	US 2000-182608P	P	20000215		
	US 2000-657554	A2	20000908		
	US 2000-657989	A2	20000908		
	US 2000-677500	A2	20001002		
	WO 2001-US27578	W	20010905		

OS MARPAT 139:30792

AB An antiproliferative, antiinflammatory, antiinfective, immunization agent of a metal ion **chelating** agent such as picolinic acid or derivs. thereof, and methods of using the same. The agents **chelate** metals in metal contg. protein complexes and enzymes required for growth, replication or inflammatory response. The prepn. can be administered systemically or for topical use. The prepn. have antineoplastic, antiviral, antiinflammatory, analgesic antiangiogenic and antiproliferative effects and are used in the treatment of warts, psoriasis, acne, skin cancers, sunburn, inflammatory responses, untoward angiogenesis and other diseases and in the prevention of sexually transmitted diseases such as genital warts, herpes and AIDS.

RE.CNT 98 THERE ARE 98 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB An antiproliferative, antiinflammatory, antiinfective, immunization agent of a metal ion **chelating** agent such as picolinic acid or derivs. thereof, and methods of using the same. The agents **chelate** metals in metal contg. protein complexes and enzymes required for growth, replication or inflammatory response. The prepn. can be administered systemically or for topical use. The prepn. have antineoplastic, antiviral, antiinflammatory, analgesic antiangiogenic and antiproliferative effects and are used in the treatment of warts, psoriasis, acne, skin cancers, sunburn, inflammatory responses, untoward angiogenesis and other diseases and in the prevention of sexually transmitted diseases such as genital warts, herpes and AIDS.

ST cancer treatment **chelating** agent picolinic acid; domestic animal cancer treatment **chelating** agent

IT Lung, neoplasm

Mammary gland, neoplasm

Prostate gland, neoplasm

(adenocarcinoma; prevention and treatment of cancer in animals using metal ion **chelating** agents such as picolinic acid in relation to zinc of zinc-finger proteins)

IT Drug delivery systems

(capsules; prevention and treatment of cancer in animals using metal ion **chelating** agents such as picolinic acid in relation to zinc of zinc-finger proteins)

IT Skin, neoplasm

(carcinoma; prevention and treatment of cancer in animals using metal

ion **chelating** agents such as picolinic acid in relation to zinc of zinc-finger proteins)

IT Intestine, neoplasm  
(colon; prevention and treatment of cancer in animals using metal ion **chelating** agents such as picolinic acid in relation to zinc of zinc-finger proteins)

IT Feed additives  
(drug administration in; prevention and treatment of cancer in animals using metal ion **chelating** agents such as picolinic acid in relation to zinc of zinc-finger proteins)

IT Liver, neoplasm  
(hepatoma; prevention and treatment of cancer in animals using metal ion **chelating** agents such as picolinic acid in relation to zinc of zinc-finger proteins)

IT Drug delivery systems  
(inhalants; prevention and treatment of cancer in animals using metal ion **chelating** agents such as picolinic acid in relation to zinc of zinc-finger proteins)

IT Drug delivery systems  
(injections, i.p.; prevention and treatment of cancer in animals using metal ion **chelating** agents such as picolinic acid in relation to zinc of zinc-finger proteins)

IT Drug delivery systems  
(injections; prevention and treatment of cancer in animals using metal ion **chelating** agents such as picolinic acid in relation to zinc of zinc-finger proteins)

IT Drug delivery systems  
(liqs.; prevention and treatment of cancer in animals using metal ion **chelating** agents such as picolinic acid in relation to zinc of zinc-finger proteins)

IT Neoplasm  
(metastasis; prevention and treatment of cancer in animals using metal ion **chelating** agents such as picolinic acid in relation to zinc of zinc-finger proteins)

IT Drug delivery systems  
(oral; prevention and treatment of cancer in animals using metal ion **chelating** agents such as picolinic acid in relation to zinc of zinc-finger proteins)

IT Bone, neoplasm  
(osteosarcoma; prevention and treatment of cancer in animals using metal ion **chelating** agents such as picolinic acid in relation to zinc of zinc-finger proteins)

IT Drug delivery systems  
(parenterals; prevention and treatment of cancer in animals using metal ion **chelating** agents such as picolinic acid in relation to zinc of zinc-finger proteins)

IT Drug delivery systems  
(powders; prevention and treatment of cancer in animals using metal ion **chelating** agents such as picolinic acid in relation to zinc of zinc-finger proteins)

IT Antiviral agents  
(prevention and treatment of cancer and viral infections in animals using metal ion **chelating** agents such as picolinic acid in relation to zinc of zinc-finger proteins)

IT Antitumor agents  
Antiulcer agents  
Chelating agents

---

Dog (Canis familiaris)  
Domestic animal  
Herpesviridae  
Human  
Human herpesvirus  
Lymphoma

Neoplasm  
Ulcer  
Wart

(prevention and treatment of cancer in animals using metal ion  
**chelating** agents such as picolinic acid in relation to zinc of  
zinc-finger proteins)

IT Drug delivery systems  
(rectal; prevention and treatment of cancer in animals using metal ion  
**chelating** agents such as picolinic acid in relation to zinc of  
zinc-finger proteins)

IT Drug delivery systems  
(transdermal; prevention and treatment of cancer in animals using metal  
ion **chelating** agents such as picolinic acid in relation to  
zinc of zinc-finger proteins)

IT Drug delivery systems  
(vaginal; prevention and treatment of cancer in animals using metal ion  
**chelating** agents such as picolinic acid in relation to zinc of  
zinc-finger proteins)

IT Human herpesvirus 3  
(varicella from; prevention and treatment of cancer in animals using  
metal ion **chelating** agents such as picolinic acid in relation  
to zinc of zinc-finger proteins)

IT Infection  
(viral; prevention and treatment of cancer and viral infections in  
animals using metal ion **chelating** agents such as picolinic  
acid in relation to zinc of zinc-finger proteins)

IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(zinc finger-contg.; prevention and treatment of cancer in animals  
using metal ion **chelating** agents such as picolinic acid in  
relation to zinc of zinc-finger proteins)

IT 7440-66-6, Zinc, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(prevention and treatment of cancer in animals using metal ion  
**chelating** agents such as picolinic acid in relation to zinc of  
zinc-finger proteins)

IT 98-98-6, Picolinic acid 536-69-6, Fusaric acid  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(prevention and treatment of cancer in animals using metal ion  
**chelating** agents such as picolinic acid in relation to zinc of  
zinc-finger proteins)

L6 ANSWER 2 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:417571 CAPLUS

DN 138:396230

TI Trans-10, cis-12 conjugated linoleic acid isomer for the treatment of  
diabetes, the reduction of body fat, improvement of insulin sensitivity,  
and reduction of hypercholesterolemia, and treatment of atherosclerosis

IN Komorowski, James R.; Juturu, Vijaya; Greenberg, Danielle

PA Nutrition 21; Inc., USA

SO PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

PI	WO 2003043569	A2	20030530	WO 2002-US36684	20021112
----	---------------	----	----------	-----------------	----------

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,  
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES,  
FI, FO, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,  
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,



MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK,  
SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,  
ZM, ZW, AM, AZ

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,  
CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,  
NE, SN, TD, TG

PRAI US 2001-332496P P 20011116

AB A compn. for treating insulin- or non-insulin-dependent diabetes, reducing body fat, improving insulin sensitivity, reducing hyperglycemia, and reducing hypercholesterolemia with conjugated linoleic acid isomer trans-10, cis-12 alone, or in combination with any form of a trivalent chromium complex is disclosed. A method of treating a subject suffering from insulin-dependent diabetes by administering a compn. that includes conjugated linoleic acid isomer trans-10, cis-12 alone, or in combination with any form of a trivalent chromium complex is similarly provided. The administration of a compn. contg. an ED of conjugated linoleic acid isomer trans-10, cis-12 alone, or in combination with any form of a trivalent chromium complex for the treatment of obesity is likewise provided.

IT Anticholesteremic agents

Antidiabetic agents

Antiobesity agents

**Chelating agents**

Human

Hypercholesterolemia

Obesity

(trans-10, cis-12 conjugated linoleic acid isomer for the treatment of diabetes, the redn. of body fat, improvement of insulin sensitivity, and redn. of hypercholesterolemia, and treatment of atherosclerosis)

IT 59-67-6, Nicotinic acid, biological studies 98-98-6, Picolinic acid

RL: NUJ (Other use, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)

(**chelating agent**; trans-10, cis-12 conjugated linoleic acid isomer for the treatment of diabetes, the redn. of body fat, improvement of insulin sensitivity, and redn. of hypercholesterolemia, and treatment of atherosclerosis)

L6 ANSWER 3 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:655091 CAPLUS

DN 137:181049

TI Agent and method of preventing and treating heavy metal exposure and toxicity

IN Fernandez-Pol, Jose A.

PA Novactyl, Inc., USA

SO U.S., 29 pp., Cont.-in-part of U. S. Ser. No. 657,554.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6441009	B1	20020827	US 2000-676911	20001002
	US 6127393	A	20001003	US 1998-127620	19980801
	US 6410570	B1	20020625	US 2000-657989	20000908
	US 6579891	B1	20030617	US 2000-657554	20000908
PRAI	US 1998-127620	A2	19980801		
	US 2000-182608P	P	20000215		
	US 2000-657554	A2	20000908		
	US 2000-657989	A2	20000908		
	US 1995-581351	A2	19951229		
	US 1996-26992P	P	19960920		
	US 1996-24221P	P	19961022		

US 1997-843157 B2 19970411

OS MARPAT 137:181049

AB An agent and method for the prevention and treatment of toxicity caused by heavy metals such as depleted uranium, tungsten and nickel and metals such as iron, lead and copper are described. The agent is a **chelating** agent such as picolinic acid or derivs. thereof. The agent **chelates** and inactivates the metals which can be carcinogenic or poisonous. The agent can be administered to **chelate** excessive copper as a result of Wilson's disease. The agent can be administered orally or by other systemic routes such as injections and the like.

RE.CNT 92 THERE ARE 92 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB An agent and method for the prevention and treatment of toxicity caused by heavy metals such as depleted uranium, tungsten and nickel and metals such as iron, lead and copper are described. The agent is a **chelating** agent such as picolinic acid or derivs. thereof. The agent **chelates** and inactivates the metals which can be carcinogenic or poisonous. The agent can be administered to **chelate** excessive copper as a result of Wilson's disease. The agent can be administered orally or by other systemic routes such as injections and the like.

IT Antiviral agents

Apoptosis

Carcinogens

**Chelating agents**

Human

Human herpesvirus

Human immunodeficiency virus 1

Mutagens

Poisoning, biological

Retroviridae

Stomach, neoplasm

Toxicity

Wilson's disease

(agent and method of preventing and treating heavy metal exposure and toxicity)

IT 98-98-6, Picolinic acid 98-98-6D, Picolinic acid, derivs. 536-69-6, Fusaric acid

RL: BSU (Biological study, unclassified); THU (Therapeutic use);

BIOL (Biological study); USES (Uses)

(agent and method of preventing and treating heavy metal exposure and toxicity)

L6 ANSWER 4 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:539500 CAPLUS

DN 137:98685

TI Oral composition containing picolinic acid and a peroxy species

IN Bhakoo, Manmohan; Joiner, Andrew; Steele, Katherine Anne; Taylor, David; Thompson, Katherine Mary; Thornthwaite, David William

PA Unilever N.V., Neth.; Unilever PLC; Hindustan Lever Ltd.

SO PCT Int. Appl., 20 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

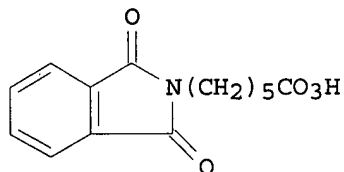
PI	WO 2002055043	A1	20020718	WO 2001-EP14496	20011207
----	---------------	----	----------	-----------------	----------

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,  
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2002136698 A1 20020926 US 2002-50970 20020116  
US 6471947 B2 20021029  
US 2003059396 A1 20030327 US 2002-50503 20020116

PRAI EP 2001-300336 A 20010116  
GI



AB An oral compn. comprising picolinic acid and a peroxy species or equiv. source thereof, characterized in that the molar ratio of picolinic acid to peroxy species or equiv. source thereof is from 1:30 to 100:1. The synergistic mixts. provide excellent antimicrobial benefit and protection against plaque, caries, and gingivitis. An example peroxide used in compns. is I.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT **Chelating agents**  
Dentifrices  
Mouthwashes  
(oral compn. contg. picolinic acid and a peroxy species)  
IT **98-98-6**, Picolinic acid 128275-31-0  
RL: COS (Cosmetic use); PAC (Pharmacological activity); **THU**  
(**Therapeutic use**); BIOL (Biological study); USES (Uses)  
(oral compn. contg. picolinic acid and a peroxy species)

L6 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 2002:461290 CAPLUS  
DN 137:15816  
TI Metal-**chelating** picolinic acid compds. for therapeutic use  
IN Fernandez-Pol, Jose A.  
PA Novactyl, Inc., USA  
SO U.S., 31 pp., Cont.-in-part of U.S. Ser. No. 657,554.  
CODEN: USXXAM

DT Patent  
LA English

FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6407125	B1	20020618	US 2000-677500	20001002
	US 5767135	A	19980616	US 1995-581351	19951229
	US 6127393	A	20001003	US 1998-127620	19980801
	US 6410570	B1	20020625	US 2000-657989	20000908
	US 6579891	B1	20030617	US 2000-657554	20000908
	US 2002037908	A1	20020328	US 2001-904987	20010712
PRAI	US 1995-581351	A2	19951229		
	US 1996-26992P	P	19960920		
	US 1996-24221P	P	19961022		
	US 1997-843157	B2	19970411		
	US 1998-127620	A2	19980801		
	US 2000-182608P	P	20000215		
	US 2000-657554	A2	20000908		
	US 2000-657989	A2	20000908		

OS MARPAT 137:15816

AB The invention discloses a biol. response-modifying metal ion **chelating** agent, e.g. picolinic acid, and analogs and derivs. thereof, as well as methods of use. The agents **chelate** metals in metal-contg. protein complexes and enzymes required for growth, replication, or inflammatory response. The prepns. can be administered systemically or topically. The products can be used to reduce systemic levels of metals in disease states (e.g. Wilson's disease), or iron or lead toxicity. The prepns. have antineoplastic, antiviral, antiinflammatory, analgesic antiangiogenic, antiproliferative as well as hematopoetic and immune stimulant, effects and are used in the treatment of warts, psoriasis, acne, cancers, sunburn, inflammatory responses, untoward angiogenesis, immune depression and other diseases and in the prevention of sexually transmitted diseases such as genital warts, herpes and AIDS.

RE.CNT 91 THERE ARE 91 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI Metal-**chelating** picolinic acid compds. for therapeutic use

AB The invention discloses a biol. response-modifying metal ion **chelating** agent, e.g. picolinic acid, and analogs and derivs. thereof, as well as methods of use. The agents **chelate** metals in metal-contg. protein complexes and enzymes required for growth, replication, or inflammatory response. The prepns. can be administered systemically or topically. The products can be used to reduce systemic levels of metals in disease states (e.g. Wilson's disease), or iron or lead toxicity. The prepns. have antineoplastic, antiviral, antiinflammatory, analgesic antiangiogenic, antiproliferative as well as hematopoetic and immune stimulant, effects and are used in the treatment of warts, psoriasis, acne, cancers, sunburn, inflammatory responses, untoward angiogenesis, immune depression and other diseases and in the prevention of sexually transmitted diseases such as genital warts, herpes and AIDS.

ST picolinate compd metal **chelator** therapeutic

IT Carcinoma

(KB cells; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Animal cell line

(KB; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Animal cell line

(LoVo; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Animal cell line

(MDA-468; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Animal cell line

(WI-38; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Mammary gland, neoplasm

(adenocarcinoma, MDA-468 cells; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Lung, neoplasm

Prostate gland, neoplasm

(adenocarcinoma; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Drug delivery systems

(capsules; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Skin, neoplasm

(carcinoma; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Intestine, neoplasm

(colon, carcinoma, LoVo cells; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Intestine, neoplasm  
(colon, metastasis; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(complexes, with metals; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Dermatitis  
(contact; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Immunity  
(disorder, decreased immune function; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Liver, neoplasm  
(hepatoma; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Drug delivery systems  
(inhalants; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Drug delivery systems  
(injections, i.p.; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Drug delivery systems  
(injections; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Drug delivery systems  
(lotions; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Antitumor agents  
Antiulcer agents  
    **Chelating** agents  
Chemotherapy  
Human  
Human papillomavirus  
Lung, disease  
Lymphoma  
Sunburn  
    (metal-**chelating** picolinic acid compds. for therapeutic use)

IT Mammary gland, neoplasm  
(metastasis; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Drug delivery systems  
(nasal; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Drug delivery systems  
(ophthalmic; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Drug delivery systems  
(oral; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Bone, neoplasm  
(osteosarcoma; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Drug delivery systems  
(parenterals; metal-**chelating** picolinic acid compds. for therapeutic use)

---

IT Allergens  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(plant, contact dermatitis from; metal-**chelating** picolinic acid compds. for therapeutic use)

IT Metals, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(protein complexes; metal-**chelating** picolinic acid compds.  
for therapeutic use)

IT Drug delivery systems  
(rectal; metal-**chelating** picolinic acid compds. for  
therapeutic use)  
IT Drug delivery systems  
(solns.; metal-**chelating** picolinic acid compds. for  
therapeutic use)  
IT Drug delivery systems  
(topical; metal-**chelating** picolinic acid compds. for  
therapeutic use)  
IT Drug delivery systems  
(transdermal; metal-**chelating** picolinic acid compds. for  
therapeutic use)  
IT Respiratory tract, disease  
(upper; metal-**chelating** picolinic acid compds. for  
therapeutic use)  
IT Drug delivery systems  
(vaginal; metal-**chelating** picolinic acid compds. for  
therapeutic use)  
IT Human herpesvirus 3  
(varicella from; metal-**chelating** picolinic acid compds. for  
therapeutic use)  
IT 7440-66-6, Zinc, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(metal-**chelating** picolinic acid compds. for therapeutic use)  
IT 98-98-6, Picolinic acid 98-98-6D, Picolinic acid,  
derivs. 536-69-6, Fusaric acid  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(metal-**chelating** picolinic acid compds. for therapeutic use)

L6 ANSWER 6 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:353329 CAPLUS

DN 136:363849

TI Methods and compositions for the improvement of insulin sensitivity,  
reduction of hyperglycemia, and reduction of hypercholesterolemia with  
chromium complexes and .alpha.-lipoic acid

IN Komorowski, James R.; Greenberg, Danielle

PA Nutrition 21, Inc., USA

SO PCT Int. Appl., 15 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002036202	A2	20020510	WO 2001-US45329	20011031
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2002030543	A5	20020515	AU 2002-30543	20011031
	US 2002098247	A1	20020725	US 2001-1322	20011031
PRAI	US 2000-245705P	P	20001102		
	WO 2001-US45329	W	20011031		

AB A compn. for improving insulin sensitivity, reducing hyperglycemia, and reducing hypercholesterolemia, the compn. including at least one chromium complex and .alpha.-lipoic acid is disclosed. A method of improving insulin sensitivity in a subject in need thereof including administering to a subject a pharmaceutically affective dose of .alpha.-lipoic acid in conjunction with at least one chromium complex selected from the group consisting of chromium picolinate, chromium nicotinate, chromic tripicolinate, chromic polynicotinate, chromium chloride, chromium histidinate, and chromium yeasts is also provided. A combination of Cr picolinate and .alpha.-lipoic acid improves the impairment in insulin sensitivity that is characteristic of Type II diabetes.

IT Anticholesteremic agents

Antidiabetic agents

Birch (*Betula lentá*)

Birch (*Betula pubescens*)

Chelating agents

Filipendula ulmaria

Gaultheria procumbens

Human

Poplar (*Populus balsamifera*)

Poplar (*Populus jackii*)

Willow (*Salix alba*)

(improvement of insulin sensitivity, redn. of hyperglycemia, and redn. of hypercholesterolemia with chromium complexes and .alpha.-lipoic acid)

IT 59-67-6D, Nicotinic acid, chromium complexes 71-00-1D, L-Histidine, chromium complexes 98-98-6D, Picolinic acid, chromium complexes 1200-22-2, .alpha.-Lipoic acid 7440-47-3D, Chromium, complexes 9004-10-8, Insulin, biological studies 14639-25-9 39345-92-1, Chromium chloride

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(improvement of insulin sensitivity, redn. of hyperglycemia, and redn. of hypercholesterolemia with chromium complexes and .alpha.-lipoic acid)

IT 59-67-6, Nicotinic acid, biological studies 98-98-6, Picolinic acid

RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological

study); RACT (Reactant or reagent); USES (Uses)

(improvement of insulin sensitivity, redn. of hyperglycemia, and redn. of hypercholesterolemia with chromium complexes and .alpha.-lipoic acid)

L6 ANSWER 7 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:353284 CAPLUS

DN 136:359638

TI Methods and compositions for the benefit of those suffering from polycystic ovary syndrome with chromium complexes

IN Katz, David P.

PA Nutrition 21, Inc., USA

SO PCT Int. Appl., 14 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002036127	A2	20020510	WO 2001-US46003	20011025
	WO 2002036127	A3	20030123		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,

MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ,  
TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,  
MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002032471 A5 20020515 AU 2002-32471 20011025

US 2002086065 A1 20020704 US 2001-1684 20011025

PRAI US 2000-244791P P 20001031

WO 2001-US46003 W 20011025

AB Compns. comprising chromium complexes, such as chromium picolinate or chromium nicotinate, are administered to a subject presenting with polycystic ovary syndrome (PCOS). The compns. may further comprise at least one of a **chelating** agent, e.g., picolinic or nicotinic acid, a cyclooxygenase inhibitor, a mucolytic, and/or a salicin-contg. herb. For example, the subject presenting with PCOS was orally administered a tablet comprising chromium picolinate and picolinic acid at a ratio of 1:10 wt./wt. at a daily dose of 1000 .mu.g of chromium. The tablet addnl. comprises guaifenesin and ibuprofen in a pharmaceutically ED. Over the course of several weeks, a decrease in body mass and improved lipid profile was obsd. The chromic picolinate sensitizes the subject's insulin and the symptoms of PCOS were reduced.

AB Compns. comprising chromium complexes, such as chromium picolinate or chromium nicotinate, are administered to a subject presenting with polycystic ovary syndrome (PCOS). The compns. may further comprise at least one of a **chelating** agent, e.g., picolinic or nicotinic acid, a cyclooxygenase inhibitor, a mucolytic, and/or a salicin-contg. herb. For example, the subject presenting with PCOS was orally administered a tablet comprising chromium picolinate and picolinic acid at a ratio of 1:10 wt./wt. at a daily dose of 1000 .mu.g of chromium. The tablet addnl. comprises guaifenesin and ibuprofen in a pharmaceutically ED. Over the course of several weeks, a decrease in body mass and improved lipid profile was obsd. The chromic picolinate sensitizes the subject's insulin and the symptoms of PCOS were reduced.

IT Birch (Betula lenta)

Birch (Betula pubescens)

**Chelating agents**

Expectorants

Filipendula ulmaria

Gaultheria procumbens

Poplar (Populus balsamifera)

Poplar (Populus jackii)

Salai (Boswellia serrata)

Willow (Salix alba)

(compns. contg. chromium complexes for treatment of polycystic ovary syndrome)

IT 53-86-1, Indomethacin 59-67-6, Nicotinic acid, biological studies

93-14-1, Guaifenesin 98-98-6, Picolinic acid 103-90-2,

Acetaminophen 15687-27-1, Ibuprofen 22204-53-1, Naproxen

RL: THU (**Therapeutic use**); BIOL (Biological study); USES (Uses)

(compns. contg. chromium complexes for treatment of polycystic ovary syndrome)

L6 ANSWER 8 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:240548 CAPLUS

DN 136:268171

TI Methods and compositions for the treatment of diabetes, the reduction of body fat, improvement of insulin sensitivity, reduction of hyperglycemia, and reduction of hypercholesterolemia with chromium complexes, conjugated fatty acids, and/or conjugated fatty alcohols

IN Katz, David P.; Komorowski, James R.; Greenberg, Danielle

PA Nutrition 21, Inc., USA

SO PCT Int. Appl., 23 pp.



CODEN: PIXXD2

DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002024180	A2	20020328	WO 2001-US29422	20010920
	WO 2002024180	A3	20030424		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2001094602	A5	20020402	AU 2001-94602	20010920
	US 2002081315	A1	20020627	US 2001-957876	20010920
	US 2003091654	A1	20030515	US 2002-319328	20021212
PRAI	US 2000-234474P	P	20000921		
	US 2001-296688P	P	20010606		
	US 2001-957876	A3	20010920		
	WO 2001-US29422	W	20010920		
AB	A compn. for treating insulin-dependent diabetes, reducing body fat, improving insulin sensitivity, reducing hyperglycemia, and reducing hypercholesterolemia with at least one chromium complex and a conjugated fatty acid or conjugated fatty alc. is disclosed. A method of treating a subject suffering from insulin-dependent diabetes by administering a compn. that includes at least one chromium complex and a conjugated fatty acid or conjugated fatty alc. is similarly provided. The administration of a compn. contg. an ED of at least one chromium complex and a conjugated fatty acid or conjugated fatty alc. for the treatment of obesity is likewise provided. Chromium picolinate or chromium nicotinate combined with conjugated linoleic acid may be used to reduce obesity and treat diabetes in humans.				
IT	Adipose tissue Anticholesteremic agents Antidiabetic agents Antidiabetic agents Antiobesity agents Antiobesity agents Birch (Betula lenta) Birch (Betula pubescens) Chelating agents Expectorants Filipendula ulmaria Gaultheria procumbens Hypolipemic agents Obesity Poplar (Populus balsamifera) Poplar (Populus jackii) Salai (Boswellia serrata) Willow (Salix alba) (linoleic acid and chromium complexes as antiobesity and antidiabetic agents)				
IT	53-86-1, Indomethacin 59-67-6D, Nicotinic acid, chromium complexes 60-33-3D, Linoleic acid, conjugates 71-00-1, Histidine, biological studies 93-14-1, Guaifenesin 98-98-6D, Picolinic acid, chromium complexes 103-90-2, Acetaminophen 463-40-1D, Linolenic acid, conjugates 506-23-0D, .alpha.-Eleostearic acid, conjugates 506-26-3D, .gamma.-Linolenic acid, conjugates 506-32-1D, Arachidonic acid,				

conjugates 506-43-4, Linoleic alcohol 506-44-5, Linolenic alcohol  
 4494-15-9, Eleostearyl alcohol 7440-47-3D, Chromium, complexes  
 7440-47-3D, Chromium, complexes with histidinate and nicotinate and  
 picolinate 13296-76-9D, Eleostearic acid, conjugates 13487-46-2,  
 Arachidonyl alcohol 15687-27-1, Ibuprofen 16833-54-8D, Pinolenic acid,  
 conjugates 20290-75-9D, Stearidonic acid, conjugates 20590-32-3D, Mead  
 acid, conjugates 22204-53-1, Naproxen 24149-05-1, .gamma.-Linolenyl  
 alcohol 25167-62-8D, Docosahexaenoic acid, conjugates 25378-27-2D,  
 Eicosapentaenoic acid, conjugates 25448-00-4D, Docosapentaenoic acid,  
 conjugates 25448-03-7D, Octadecatrienoic acid, conjugates 26764-24-9D,  
 Docosadienoic acid, conjugates 26764-25-0D, Octadecadienoic acid,  
 conjugates 27400-91-5D, Eicosatetraenoic acid, conjugates 27456-22-0D,  
 Docosatetraenoic acid, conjugates 39345-92-1, Chromium chloride  
 61361-73-7, .alpha.-Eleostearyl alcohol 87291-24-5, Eicosatetraen-1-ol  
 87291-25-6, Eicosapentaen-1-ol 115111-97-2, Docosahexaen-1-ol  
 123739-44-6, Docosapentaen-1-ol 149341-94-6, Octadecadien-1-ol  
 150908-97-7, Docosatetraen-1-ol 181213-42-3 181213-43-4 405279-79-0  
 405282-77-1, Octadecatrien-1-ol 405282-89-5, Docosadien-1-ol  
 RL: PAC (Pharmacological activity); **THU (Therapeutic use)**; BIOL  
 (Biological study); USES (Uses)

(linoleic acid and chromium complexes as antiobesity and antidiabetic  
 agents)

IT 59-67-6, Nicotinic acid, biological studies **98-98-6**, Picolinic  
 acid

RL: **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)  
 (linoleic acid and chromium complexes as antiobesity and antidiabetic  
 agents)

L6 ANSWER 9 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:185083 CAPLUS

DN 136:226783

TI **Chelating** agent and method of prevention and treatment of cancer  
 and other diseases in animals

IN Fernandez-Pol, Jose A.

PA Novactyl, Inc., USA

SO PCT Int. Appl., 73 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002020486	A2	20020314	WO 2001-US27578	20010905
	WO 2002020486	A3	20020704		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,			
		CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,			
		GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,			
		LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,			
		PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,			
		UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,			
		DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,			
		BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 6579891	B1	20030617	US 2000-657554	20000908
	AU 2001088788	A5	20020322	AU 2001-88788	20010905
PRAI	US 2000-657554	A	20000908		
	US 1995-581351	A2	19951229		
	US 1996-26992P	P	19960920		
	US 1996-24221P	P	19961022		
	US 1997-843157	B2	19970411		
	US 1998-127620	A2	19980801		
	US 2000-182608P	P	20000215		
	WO 2001-US27578	W	20010905		

OS MARPAT 136:226783

AB An antiproliferative, anti inflammatory, antiinfective, immunization agent of a metal ion **chelating** agent such as picolinic acid or derivs. thereof, and methods of using the same. The agents **chelate** metals in metal contg. protein complexes and enzymes required for growth, replication or inflammatory response. The preps. can be administered systemically or for topical use. The preps. have antineoplastic, antiviral, antiinflammatory, analgesic antiangiogenic and antiproliferative effects and are used in the treatment of warts,, psoriasis, acne, skin cancers, sunburn, inflammatory responses, untoward angiogenesis and other diseases and in the prevention of sexually transmitted diseases such as genital warts, herpes and AIDS.

TI **Chelating** agent and method of prevention and treatment of cancer and other diseases in animals

AB An antiproliferative, anti inflammatory, antiinfective, immunization agent of a metal ion **chelating** agent such as picolinic acid or derivs. thereof, and methods of using the same. The agents **chelate** metals in metal contg. protein complexes and enzymes required for growth, replication or inflammatory response. The preps. can be administered systemically or for topical use. The preps. have antineoplastic, antiviral, antiinflammatory, analgesic antiangiogenic and antiproliferative effects and are used in the treatment of warts, psoriasis, acne, skin cancers, sunburn, inflammatory responses, untoward angiogenesis and other diseases and in the prevention of sexually transmitted diseases such as genital warts, herpes and AIDS.

ST **chelating** agent disease therapy

IT Antitumor agents  
(MDA-468; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)

IT Reproductive tract, neoplasm  
(acuminate wart; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)

IT Wart  
(acuminate, genital; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)

IT Prostate gland  
(adenocarcinoma, inhibitors; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)

IT Antibodies  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(anticancer; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)

IT Antitumor agents  
(bone, metastasis; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)

IT Antitumor agents  
(carcinoma, KB cells; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)

IT AIDS (disease)  
Acne  
Analgesics  
Angiogenesis inhibitors  
Anti-AIDS agents  
Anti-infective agents  
Anti-inflammatory agents  
Antiviral agents  
**Chelating** agents  
Dog (Canis familiaris)  
Domestic animal  
Horse (Equus caballus)  
Human  
Human herpesvirus

Immunization  
Mouthwashes  
Papillomavirus  
Psoriasis  
Retroviridae  
Sexually transmitted diseases  
Sunburn  
Vaccines  
Wart

- (**chelating** agent and method of prevention and treatment of cancer and other diseases in animals)
- IT Heat-shock proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(**chelating** agent and method of prevention and treatment of cancer and other diseases in animals)
- IT Interferons  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(**chelating** agent and method of prevention and treatment of cancer and other diseases in animals)
- IT Antitumor agents  
(colon carcinoma, LoVo cells; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)
- IT Intestine, neoplasm  
(colon, carcinoma, inhibitors, LoVo cells; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)
- IT Drug delivery systems  
(inhalation; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)
- IT Skin, neoplasm  
(inhibitors; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)
- IT Skin, disease  
(lesion; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)
- IT Antitumor agents  
(lymphoma; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)
- IT Bone, neoplasm  
(metastasis, inhibitors; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)
- IT Drug delivery systems  
(nasal; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)
- IT Drug delivery systems  
(ointments; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)
- IT Drug delivery systems  
(ophthalmic; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)
- IT Bone, neoplasm  
(osteosarcoma, inhibitors; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)
- IT Antitumor agents  
(osteosarcoma; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)
- IT Antitumor agents  
(prostate adenocarcinoma; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)
- IT Radiotherapy  
(radioisotope; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)

IT Antitumor agents  
(skin; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)

IT Drug delivery systems  
(solns.; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)

IT Drug delivery systems  
(vaginal; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)

IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(zinc finger-contg.; **chelating** agent and method of prevention and treatment of cancer and other diseases in animals)

IT 51-21-8, 5-FU **98-98-6**, Picolinic acid **536-69-6**,  
Fusaric acid 14769-73-4, Levamisole  
RL: PAC (Pharmacological activity); **THU (Therapeutic use)**; BIOL  
(Biological study); USES (Uses)  
(**chelating** agent and method of prevention and treatment of cancer and other diseases in animals)

L6 ANSWER 10 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 2002:66 CAPLUS  
DN 136:226602  
TI Influence of biometals on carbohydrate metabolism in animal tissues  
AU Mynka, A. F.; Volos, O. P.; Alekseyevych, J. I.; Nektgaev, I. O.  
CS L'viv. Derzhavnii Med. Univ., Lvov, Ukraine  
SO Farmatsevtichnii Zhurnal (Kiev) (2001), (5), 83-86  
CODEN: FRZKAP; ISSN: 0367-3057  
PB Zdorov'ya  
DT Journal  
LA Ukrainian  
AB The exptl. research of influence of biometals on carbohydrate metab. in fabrics of exptl. animals is conducted. Is established, that **chelates** of chromium and zinc lower a level of glucose in a blood on 24-34% within day. The influence of compds. of chromium and zinc on a hypoglycemic action of derivs. of sulfoarea and biguanidine is investigated. Is established, that the ions Zn<sup>2+</sup> and Cr<sup>3+</sup> strengthen an action of derivs. sulfoarea and practically do not influence an operation of derivs. biguanidine. The obtained outcomes show, that the compds. of chromium and zinc probably stabilize concn. of insulin, at the expense of deceleration of its oxidn. by enzymes.

AB The exptl. research of influence of biometals on carbohydrate metab. in fabrics of exptl. animals is conducted. Is established, that **chelates** of chromium and zinc lower a level of glucose in a blood on 24-34% within day. The influence of compds. of chromium and zinc on a hypoglycemic action of derivs. of sulfoarea and biguanidine is investigated. Is established, that the ions Zn<sup>2+</sup> and Cr<sup>3+</sup> strengthen an action of derivs. sulfoarea and practically do not influence an operation of derivs. biguanidine. The obtained outcomes show, that the compds. of chromium and zinc probably stabilize concn. of insulin, at the expense of deceleration of its oxidn. by enzymes.

ST chromium zinc biometal **chelating** antihyperglycemic sulfoarea interaction

IT Antidiabetic agents  
**Chelating agents**  
(influence of biometals on carbohydrate metab. in animal tissues)

IT 70-47-3D, L-Asparagine, complex with magnesium and manganese **98-98-6D**, Picolinic acid, complex with chromium 657-24-9, Metformin 7439-95-4D, Magnesium, complex with asparagine 7439-96-5D, Manganese, complex with asparagine 7440-47-3D, Chromium, complex with picolinic acid 7440-66-6D, Zinc, compds. 22537-22-0D, Magnesium ion, compds., biological studies 93479-97-1, Amaryl  
RL: PAC (Pharmacological activity); **THU (Therapeutic use)**; BIOL

(Biological study); USES (Uses)

(influence of biometals on carbohydrate metab. in animal tissues)

L6 ANSWER 11 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:617804 CAPLUS

DN 135:175368

TI Antiproliferative, antiinflammatory, antiinfective, immunomodulating  
**chelating** agents such as picolinic acid

IN Fernandez-Pol, Jose A.; Amin, Avinash N.; Douglas, Michael G.

PA Novactyl, Inc., USA

SO PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001060349	A2	20010823	WO 2001-US4897	20010215
	WO 2001060349	A3	20011108		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	US 6403618	B1	20020611	US 2000-677506	20001002
	EP 1257262	A2	20021120	EP 2001-909253	20010215
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	BR 2001008400	A	20030311	BR 2001-8400	20010215
PRAI	US 2000-182608P	P	20000215		
	WO 2001-US4897	W	20010215		
AB	An antiproliferative, antiinflammatory, antiinfective, immunization agent comprises a <b>chelating</b> agent such as picolinic acid, analogs or derivs. The agents <b>chelate</b> metals in metal contg. protein complexes and enzymes required for growth, replication or inflammatory response. The prepn. can be administered systemically or topically. The products can be used to reduce systemic levels of metals in disease states such as Wilson's disease, iron or lead toxicity. The prepn. have antineoplastic, antiviral, antiinflammatory, analgesic antiangiogenic and antiproliferative effects and are used in the treatment of warts, psoriasis, acne, cancers, sunburn, inflammatory responses, untoward angiogenesis and other diseases and in the prevention of sexually transmitted diseases such as genital warts, herpes and AIDS. An example was given showing the effects of picolinic acid on growth of WI-38, LoVo and KB cells.				
TI	Antiproliferative, antiinflammatory, antiinfective, immunomodulating <b>chelating</b> agents such as picolinic acid				
AB	An antiproliferative, antiinflammatory, antiinfective, immunization agent comprises a <b>chelating</b> agent such as picolinic acid, analogs or derivs. The agents <b>chelate</b> metals in metal contg. protein complexes and enzymes required for growth, replication or inflammatory response. The prepn. can be administered systemically or topically. The products can be used to reduce systemic levels of metals in disease states such as Wilson's disease, iron or lead toxicity. The prepn. have antineoplastic, antiviral, antiinflammatory, analgesic antiangiogenic and antiproliferative effects and are used in the treatment of warts, psoriasis, acne, cancers, sunburn, inflammatory responses, untoward angiogenesis and other diseases and in the prevention of sexually transmitted diseases such as genital warts, herpes and AIDS. An example				

was given showing the effects of picolinic acid on growth of WI-38, LoVo and KB cells.

ST picolinic acid pharmaceutical; antiproliferative agent picolinic acid; antiinflammatory agent picolinic acid; **chelating** agent picolinic acid; antiinfective agent picolinic acid; immunomodulator picolinic acid

IT AIDS (disease)  
Acne  
Analgesics  
Anti-infective agents  
Anti-inflammatory agents  
Antitumor agents  
Antiviral agents  
**Chelating** agents  
Drug delivery systems  
Human immunodeficiency virus  
Immunomodulators  
Preservatives  
Wilson's disease  
(antiproliferative, antiinflammatory, antiinfective, immunomodulating **chelating** agents such as picolinic acid)

IT Proliferation inhibition  
(proliferation inhibitors; antiproliferative, antiinflammatory, antiinfective, immunomodulating **chelating** agents such as picolinic acid)

IT 98-98-6, Picolinic acid 536-69-6, Fusaric acid  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)  
(antiproliferative, antiinflammatory, antiinfective, immunomodulating **chelating** agents such as picolinic acid)

IT 7439-89-6, Iron, biological studies  
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
(overload; antiproliferative, antiinflammatory, antiinfective, immunomodulating **chelating** agents such as picolinic acid)

IT 7439-92-1, Lead, biological studies  
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
(poisoning; antiproliferative, antiinflammatory, antiinfective, immunomodulating **chelating** agents such as picolinic acid)

L6 ANSWER 12 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 2000:699190 CAPLUS  
DN 133:247312  
TI Antiproliferative, anti-infective, anti-inflammatory, autologous immunization agent and method  
IN Fernandez-Pol, Jose A.  
PA Novactyl, Inc., USA  
SO U.S., 29 pp., Cont.-in-part of U.S. Ser. No. 843,157, abandoned.  
CODEN: USXXAM  
DT Patent  
LA English  
FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6127393	A	20001003	US 1998-127620	19980801
	US 5767135	A	19980616	US 1995-581351	19951229
	US 6410570	B1	20020625	US 2000-657989	20000908
	US 6579891	B1	20030617	US 2000-657554	20000908
	US 6407125	B1	20020618	US 2000-677500	20001002
	US 6441009	B1	20020827	US 2000-676911	20001002
	US 2002037908	A1	20020328	US 2001-904987	20010712
PRAI	US 1995-581351	A2	19951229		
	US 1996-26992P	P	19960920		
	US 1996-24221P	P	19961022		

US 1997-843157 B2 19970411  
US 1998-127620 A1 19980801  
US 2000-182608P P 20000215  
US 2000-657554 A2 20000908  
US 2000-657989 A2 20000908  
US 2000-677500 A2 20001002

AB An antiproliferative, anti-inflammatory, anti-infective, immunization agent of a metal ion **chelating** agent such as picolinic acid or derivs. thereof, and methods of using the same. The agents **chelate** metals in metal contg. protein complexes required for growth, replication or inflammatory response. The preps. can be administered systemically or topically. The preps. have antineoplastic, antiviral, anti-inflammatory and antiproliferative effects and are used in the treatment of warts, psoriasis, acne, skin cancers, sunburn and other proliferative diseases and in the prevention of sexually transmitted diseases such as genital warts, herpes and AIDS. The agents also can be used to induce autologous immunol.

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB An antiproliferative, anti-inflammatory, anti-infective, immunization agent of a metal ion **chelating** agent such as picolinic acid or derivs. thereof, and methods of using the same. The agents **chelate** metals in metal contg. protein complexes required for growth, replication or inflammatory response. The preps. can be administered systemically or topically. The preps. have antineoplastic, antiviral, anti-inflammatory and antiproliferative effects and are used in the treatment of warts, psoriasis, acne, skin cancers, sunburn and other proliferative diseases and in the prevention of sexually transmitted diseases such as genital warts, herpes and AIDS. The agents also can be used to induce autologous immunol.

IT **Chelating agents**  
(pharmaceutical; antiproliferative, anti-infective, anti-inflammatory, autologous immunization agent and method)

IT 98-98-6, Picolinic acid 536-69-6, Fusaric acid  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (**Therapeutic use**); BIOL (Biological study); USES (Uses)  
(antiproliferative, anti-infective, anti-inflammatory, autologous immunization agent and method)

L6 ANSWER 13 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 1999:325284 CAPLUS  
DN 131:166327

TI Aluminum mobilization effects of desferrioxamine and a series of **chelators**: a comparative study in the rat

AU Gomez, M.; Esparza, J. L.; Domingo, J. L.; Llobet, J. M.; Corbella, J.; Singh, P. K.; Jones, M. M.

CS Laboratory of Toxicology and Environmental Health, School of Medicine, "Rovira i Virgili" University, Reus, 43201, Spain

SO Metal Ions in Biology and Medicine, Proceedings of the International Symposium on Metal Ions in Biology and Medicine, 5th, Neuherberg/Munich, Germany, May 8-10, 1998 (1998), 293-297. Editor(s): Collery, Phillipe. Publisher: Libbey Eurotext, Montrouge, Fr.  
CODEN: 67RFAL

DT Conference

LA English

AB The in vivo aluminum **chelation** efficacy of eight 3-hydroxypyrid-4-ones, desferrioxamine, and other **chelators** were reported.

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI Aluminum mobilization effects of desferrioxamine and a series of **chelators**: a comparative study in the rat



AB The in vivo aluminum **chelation** efficacy of eight  
3-hydroxypyrid-4-ones, desferrioxamine, and other **chelators** were  
reported.

IT Bone  
Brain  
    **Chelating agents**  
Kidney  
Liver  
Organ, animal  
Spleen  
Urine  
    (aluminum mobilization effects of desferrioxamine and series of  
    **chelators**)

IT Structure-activity relationship  
    (aluminum mobilizing; aluminum mobilization effects of desferrioxamine  
    and series of **chelators**)

IT 7429-90-5, Aluminum, biological studies  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL  
(Biological study); PROC (Process)  
    (aluminum mobilization effects of desferrioxamine and series of  
    **chelators**)

IT 70-51-9, Desferrioxamine **98-98-6**, Picolinic acid 303-38-8,  
2,3-Dihydroxybenzoic acid 516-05-2, Methylmalonic acid 1121-23-9D,  
3-Hydroxypyrid-4-one, derivs. 1170-02-1, Ethylenediaminedi(o-  
hydroxyphenylacetic acid) 30652-11-0, 1,2-Dimethyl-3-hydroxypyrid-4-one  
30652-22-3, 1-Benzyl-2-methyl-3-hydroxypyrid-4-one 143489-91-2  
158534-84-0 185743-67-3 185743-68-4 185743-70-8 189131-42-8,  
1-Benzyl-2-ethyl-3-hydroxypyrid-4-one 189131-43-9  
RL: **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)  
    (aluminum mobilization effects of desferrioxamine and series of  
    **chelators**)

L6 ANSWER 14 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 1998:760036 CAPLUS  
DN 130:13218  
TI A method for the improvement of neuronal regeneration  
IN Muller, H. W.; Stichel-Gunkel, Christine C.  
PA Germany  
SO Eur. Pat. Appl., 8 pp.  
CODEN: EPXXDW  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 878480	A1	19981118	EP 1997-107846	19970514
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	WO 9851708	A1	19981119	WO 1998-EP2808	19980513
	W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, GW, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9876542	A1	19981208	AU 1998-76542	19980513
	EP 981549	A1	20000301	EP 1998-924307	19980513
	EP 981549	B1	20020925		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, IE, FI				
	AT 224915	E	20021015	AT 1998-924307	19980513
	ES 2180175	T3	20030201	ES 1998-924307	19980513
	US 2002115598	A1	20020822	US 2000-423622	20000208

PRAI EP 1997-107846 A 19970514  
WO 1998-EP2808 W 19980513

AB A method for the improvement of neuronal regeneration by prevention or inhibition of basal membrane formation induced by a lesion of neuronal tissue. The method uses antibodies against collagen IV, laminin, entactin, accessory substances for proper function, or the assembly of the basal membrane; Fe-**chelating** agent; inhibitors of amino acid hydroxylases; 2-oxoglutarate competitors; antisense oligonucleotides or oligonucleotide analogs; and the like.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB A method for the improvement of neuronal regeneration by prevention or inhibition of basal membrane formation induced by a lesion of neuronal tissue. The method uses antibodies against collagen IV, laminin, entactin, accessory substances for proper function, or the assembly of the basal membrane; Fe-**chelating** agent; inhibitors of amino acid hydroxylases; 2-oxoglutarate competitors; antisense oligonucleotides or oligonucleotide analogs; and the like.

IT **Chelating** agents

(Fe-; antibodies against collagen IV or laminin or entactin and basal membrane formation inhibitors for improvement of neuronal regeneration)

IT 70-51-9, Desferrioxamine 98-79-3, 5-Oxoproline **98-98-6D**,  
Pyridine-2-carboxylic acid, derivs. 99-50-3D, 3,4-Dihydroxybenzoic acid,  
di-Et esters 100-26-5D, Pyridine-2,5-dicarboxylic acid, derivs.  
147-85-3D, L-Proline, analogs, biological studies 151-18-8,  
.beta.-Aminopropionitrile 366-18-7D, 2,2'-Bipyridine, derivs.  
499-80-9D, Pyridine-2,4-dicarboxylic acid, derivs. 500-05-0D, Coumalic  
acid, salts 602-65-3D, derivs. 1802-30-8D, 2,2'-Bipyridine-5,5'-  
dicarboxylic acid, derivs. and salts 4394-11-0D, 3,4'-Bipyridine,  
derivs. 5262-39-5D, N-Oxaloglycine, derivs. 6813-38-3D,  
2,2'-Bipyridine-4,4'-dicarboxylic acid, Et esters or ethyl amides  
78415-72-2 91776-47-5, Fibrostatin C 216151-27-8

RL: **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)

(antibodies against collagen IV or laminin or entactin and basal membrane formation inhibitors for improvement of neuronal regeneration)

L6 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1998:441387 CAPLUS

DN 129:171647

TI Aluminum distribution and excretion: A comparative study of a number of **chelating** agents in rats

AU Gomez, Mercedes; Esparza, Jose L.; Domingo, Jose L.; Corbella, Jacinto; Singh, Pramod K.; Jones, Mark M.

CS Laboratory of Toxicology and Environmental Health, School of Medicine, "Rovira i Virgili" University, Reus, 43201, Spain

SO Pharmacology & Toxicology (Copenhagen) (1998), 82(6), 295-300  
CODEN: PHTOEH; ISSN: 0901-9928

PB Munksgaard International Publishers Ltd.

DT Journal

LA English

AB The present study was conducted to assess in rats the comparative effects of a no. of **chelating** agents on the urinary excretion and tissue distribution of Al. Adult male Sprague-Dawley rats received a single i.p. dose of aluminum (Al) nitrate nonahydrate (0.24 mmol/kg). Ten min after Al injection, 1,2-dimethyl-3-hydroxypyrid-4-one, 2,3-dihydroxybenzoic acid, picolinic acid, methylmalonic acid, ethylenediamine-di(o-hydroxyphenylacetic) acid, 1-benzyl-2-methyl-3-hydroxypyrid-4-one, 1-(p-methylbenzyl)-2-methyl-3-hydroxypyrid-4-one, 1-(p-methoxybenzyl)-2-methyl-3-hydroxypyrid-4-one, 1-(p-chlorobenzyl)-2-methyl-3-hydroxypyrid-4-one, 1-benzyl-2-ethyl-3-hydroxypyrid-4-one, 1-(p-methylbenzyl)-2-ethyl-3-hydroxypyrid-4-one, 1-[3-hydroxy-2-methyl-4-oxopyridyl]-2-ethanesulfonic acid and 1-benzyl-(4-carboxylic acid)-3-hydroxy-2-methyl-4-oxopyridine were given by gavage at 1.79 mmol/kg. A control group received similar

vols. of distd. water. An addnl. group of rats received a s.c. injection of desferrioxamine at 1.79 mmol/kg. Urine samples were collected daily for three consecutive days and the animals were killed after this period. Samples of brain, bone, liver, kidney and spleen were collected. Although desferrioxamine, 1,2-dimethyl-3-hydroxypyrid-4-one, 1-(p-methylbenzyl)-2-methyl-3-hydroxypyrid-4-one, 1-(p-methoxybenzyl)-2-methyl-3-hydroxypyrid-4-one, 1-(p-methylbenzyl)-2-ethyl-3-hydroxypyrid-4-one, 1-[3-hydroxy-2-methyl-4-oxopyridyl]-2-ethanesulfonic acid and 1-benzyl-(4-carboxylic acid)-3-hydroxy-2-methyl-4-oxopyridine significantly enhanced the total excretion of Al into urine, only treatment with 1-(p-chlorobenzyl)-2-methyl-3-hydroxypyrid-4-one and 1-benzyl-2-ethyl-3-hydroxypyrid-4-one significantly reduced Al concns. in all analyzed tissues. No beneficial effects of the remaining **chelators** on Al mobilization were obsd. Further studies on the effects of some 3-hydroxypyrid-4-ones on Al removal can be of interest for the treatment of Al accumulation and toxicity.

RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI Aluminum distribution and excretion: A comparative study of a number of **chelating** agents in rats

AB The present study was conducted to assess in rats the comparative effects of a no. of **chelating** agents on the urinary excretion and tissue distribution of Al. Adult male Sprague-Dawley rats received a single i.p. dose of aluminum (Al) nitrate nonahydrate (0.24 mmol/kg). Ten min after Al injection, 1,2-dimethyl-3-hydroxypyrid-4-one, 2,3-dihydroxybenzoic acid, picolinic acid, methylmalonic acid, ethylenediamine-di(o-hydroxyphenylacetic) acid, 1-benzyl-2-methyl-3-hydroxypyrid-4-one, 1-(p-methylbenzyl)-2-methyl-3-hydroxypyrid-4-one, 1-(p-methoxybenzyl)-2-methyl-3-hydroxypyrid-4-one, 1-(p-chlorobenzyl)-2-methyl-3-hydroxypyrid-4-one, 1-benzyl-2-ethyl-3-hydroxypyrid-4-one, 1-(p-methylbenzyl)-2-ethyl-3-hydroxypyrid-4-one, 1-[3-hydroxy-2-methyl-4-oxopyridyl]-2-ethanesulfonic acid and 1-benzyl-(4-carboxylic acid)-3-hydroxy-2-methyl-4-oxopyridine were given by gavage at 1.79 mmol/kg. A control group received similar vols. of distd. water. An addnl. group of rats received a s.c. injection of desferrioxamine at 1.79 mmol/kg. Urine samples were collected daily for three consecutive days and the animals were killed after this period. Samples of brain, bone, liver, kidney and spleen were collected. Although desferrioxamine, 1,2-dimethyl-3-hydroxypyrid-4-one, 1-(p-methylbenzyl)-2-methyl-3-hydroxypyrid-4-one, 1-(p-methoxybenzyl)-2-methyl-3-hydroxypyrid-4-one, 1-(p-methylbenzyl)-2-ethyl-3-hydroxypyrid-4-one, 1-[3-hydroxy-2-methyl-4-oxopyridyl]-2-ethanesulfonic acid and 1-benzyl-(4-carboxylic acid)-3-hydroxy-2-methyl-4-oxopyridine significantly enhanced the total excretion of Al into urine, only treatment with 1-(p-chlorobenzyl)-2-methyl-3-hydroxypyrid-4-one and 1-benzyl-2-ethyl-3-hydroxypyrid-4-one significantly reduced Al concns. in all analyzed tissues. No beneficial effects of the remaining **chelators** on Al mobilization were obsd.

Further studies on the effects of some 3-hydroxypyrid-4-ones on Al removal can be of interest for the treatment of Al accumulation and toxicity.

ST aluminum organ distribution excretion **chelating** agent; urine aluminum excretion **chelating** agent; hydroxypyridinone aluminum **chelation** rat

IT Urine  
(aluminum distribution and excretion response to **chelating** agents in rats)

IT Bone  
Brain  
Kidney  
Liver  
Spleen

(aluminum distribution in rat organs and urinary excretion response to **chelating** agents)

IT Biological transport  
(excretion, urinary; of aluminum response to **chelating**

agents)

IT **Chelating agents**  
(pharmaceutical; aluminum distribution in rat organs and urinary excretion response to)

IT 70-51-9, Desferrioxamine **98-98-6**, Picolinic acid 303-38-8, 2,3-Dihydroxybenzoic acid 516-05-2, Methylmalonic acid 1170-02-1, Ethylenediamine-di(o-hydroxyphenylacetic) acid 30652-11-0, 1,2-Dimethyl-3-hydroxypyrid-4-one 30652-22-3 143489-91-2 158534-84-0 185743-67-3 185743-68-4 185743-70-8 189131-42-8 189131-43-9  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)  
(aluminum distribution in rat organs and urinary excretion response to **chelating agents**)

IT 7429-90-5, Aluminum, biological studies  
RL: ADV (Adverse effect, including toxicity); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(distribution in rat organs and urinary excretion response to **chelating agents**)

IT 7429-90-5, Aluminum, biological studies  
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (toxicity; **chelating agents** effect on aluminum distribution and urinary excretion in relation to treatment of Al accumulation and)

L6 ANSWER 16 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1997:491644 CAPLUS

DN 127:99847

TI Antiviral and antiproliferative agent

IN Fernandez-Pol, Jose A.

PA Fernandez-Pol, Jose A., USA

SO PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9724121	A1	19970710	WO 1996-US20636	19961220
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
	US 5767135	A	19980616	US 1995-581351	19951229
	CA 2241213	AA	19970710	CA 1996-2241213	19961220
	AU 9713495	A1	19970728	AU 1997-13495	19961220
	EP 869789	A1	19981014	EP 1996-945035	19961220
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			

PRAI US 1995-581351 A 19951229

WO 1996-US20636 W 19961220

AB An antiproliferative and antiviral prepn. of a metal ion-**chelating** agent such as picolinic acid or derivs. thereof is disclosed. The **chelating agent** is provided in an ointment base or in soln. for topical or intravaginal use. The topical prepn. have antiviral and antiproliferative effects and are used in the treatment of warts, psoriasis, skin cancers and other proliferative diseases and in the prevention of sexually transmitted diseases such as genital warts, herpes and AIDS.

AB An antiproliferative and antiviral prepn. of a metal ion-chelating agent such as picolinic acid or derivs. thereof is disclosed. The **chelating** agent is provided in an ointment base or in soln. for topical or intravaginal use. The topical prepn. have antiviral and antiproliferative effects and are used in the treatment of warts, psoriasis, skin cancers and other proliferative diseases and in the prevention of sexually transmitted diseases such as genital warts, herpes and AIDS.

IT AIDS (disease)  
Antitumor agents  
Antiviral agents  
**Chelating agents**  
Herpesviridae  
Human immunodeficiency virus  
Papillomavirus  
Psoriasis  
Retroviridae  
(antiviral and antiproliferative agent)

IT 98-98-6, Picolinic acid 536-69-6, Fusaric acid  
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); PROC (Process); USES (Uses)  
(antiviral and antiproliferative agent)

IT 7440-66-6, Zinc, biological studies  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(**chelation** of; antiviral and antiproliferative agent)

L6 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1995:324847 CAPLUS

DN 122:89565

TI Synergistic preservative systems with enhanced antimicrobial activity.

IN DeCicco, Benedict T.; Keeven, James Kevin

PA USA

SO PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9427436	A1	19941208	WO 1994-US5693	19940520
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRAI	US 1993-64470		19930520		

AB A preservative system includes a nonirritating level of a quaternary ammonium compd., such as benzalkonium chloride or cetylpyridinium chloride, and either a paraben, hydrophobic **chelator**, or alc. (benzyl alc. or phenylethyl alc.). Suitable **chelators** are thenoyltrifluoroacetone, phenanthroline, methylphenanthroline, chlorophenanthroline, nitrophenanthroline, hydroxyquinoline, bipyridine, picolinic acid and dipicolinic acid. The combination of the two compds. provides for synergistic killing against hard-to-kill bacteria and adapted bacteria, as well as yeasts and molds. They are useful in nasal sprays, contact lens solns., liq. cold medicines, etc.

AB A preservative system includes a nonirritating level of a quaternary ammonium compd., such as benzalkonium chloride or cetylpyridinium chloride, and either a paraben, hydrophobic **chelator**, or alc. (benzyl alc. or phenylethyl alc.). Suitable **chelators** are thenoyltrifluoroacetone, phenanthroline, methylphenanthroline, chlorophenanthroline, nitrophenanthroline, hydroxyquinoline, bipyridine, picolinic acid and dipicolinic acid. The combination of the two compds. provides for synergistic killing against hard-to-kill bacteria and adapted

bacteria, as well as yeasts and molds. They are useful in nasal sprays, contact lens solns., liq. cold medicines, etc.

IT 60-12-8D, Phenylethyl alcohol, mixts. with quaternary ammonium compds.  
66-71-7D, 1,10-Phenanthroline, mixts. with quaternary ammonium compds.  
79-90-3D, Triclobisonium chloride, mixts. contg. 94-13-3D,  
Propylparaben, mixts. with quaternary ammonium compds. 94-26-8D,  
Butylparaben, mixts. with quaternary ammonium compds. **98-98-6D**,  
Picolinic acid, mixts. with quaternary ammonium compds. 99-76-3D,  
Methylparaben, mixts. with quaternary ammonium compds. 100-51-6D, Benzyl  
alcohol, mixts. with quaternary ammonium compds. 120-47-8D,  
Ethylparaben, mixts. with quaternary ammonium compds. 123-03-5D,  
Cetylpyridinium chloride, mixts. contg. 148-24-3D, 8-Quinolinol, mixts.  
with quaternary ammonium compds. 326-91-0D, Thenoyltrifluoroacetone,  
mixts. with quaternary ammonium compds. 499-83-2D, Dipicolinic acid,  
mixts. with quaternary ammonium compds. 4199-88-6D, mixts. with  
quaternary ammonium compds. 4199-89-7D, mixts. with quaternary ammonium  
compds. 5538-94-3D, Dioctyldimethylammonium chloride, mixts. contg.  
37275-48-2D, Bipyridine, mixts. with quaternary ammonium compds.  
RL: **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)  
(synergistic antimicrobial preservatives)